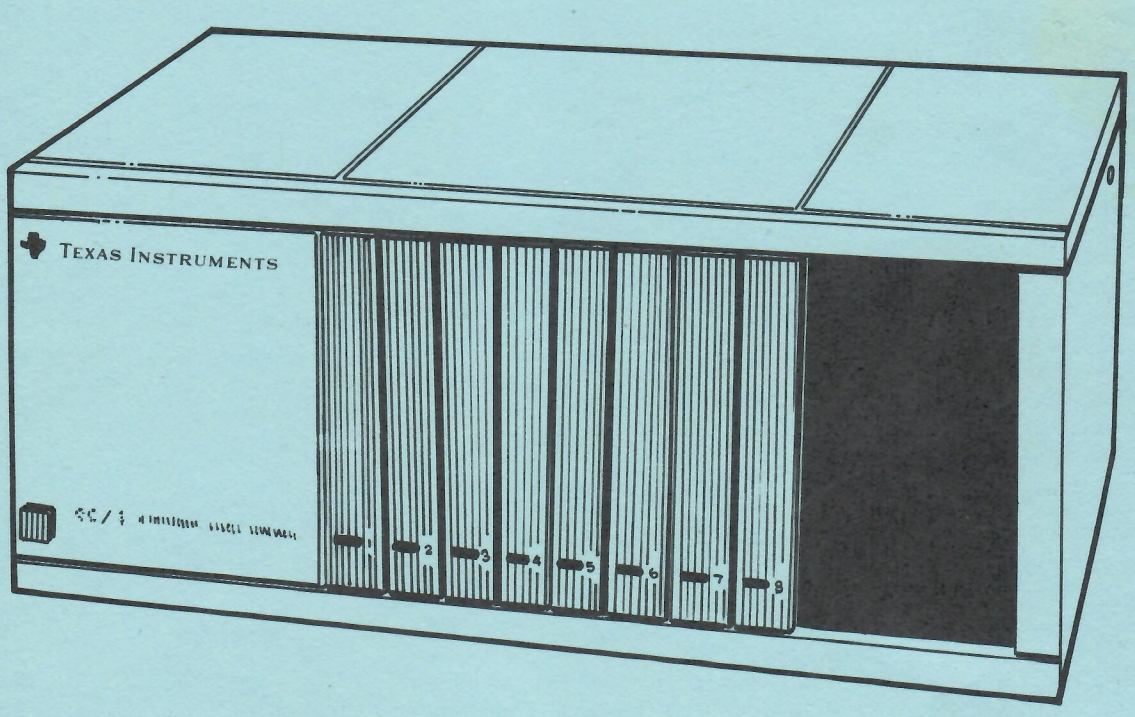
Peripheral Expansion System

Model No. PHP1200



Federal Communications Commission Requirements Concerning Radio Frequency Interference

The Texas Instruments Home Computer and peripherals generate and use radio frequency (RF) energy. If not installed and used properly (as outlined in the instructions provided by Texas Instruments), this equipment may cause interference to radio and television reception.

This equipment has been type-tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules. These rules are designed to provide reasonable protection against radio and television interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception (which you can determine by turning the equipment off and on), try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna (that is, the antenna for the radio or television that is "receiving" the interference).
- Change the position of the computer with respect to the radio or television equipment that is receiving interference.
- Plug the computer into a different wall outlet so that the computer and the equipment receiving interference are on different branch circuits.

If these measures do not eliminate the interference, please consult your dealer or an experienced radio/television technician for additional suggestions. Also, the Federal Communications Commission has prepared a helpful booklet, "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from

The US Government Printing Office
Washington, D. C. 20402

Please specify Stock Number 004-000-00345-4 when ordering copies.

WARNING: This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC Rules. Only peripherals (computer input/output devices, terminals, printers, etc.) certified to comply with the Class B limits may be attached to this computer. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

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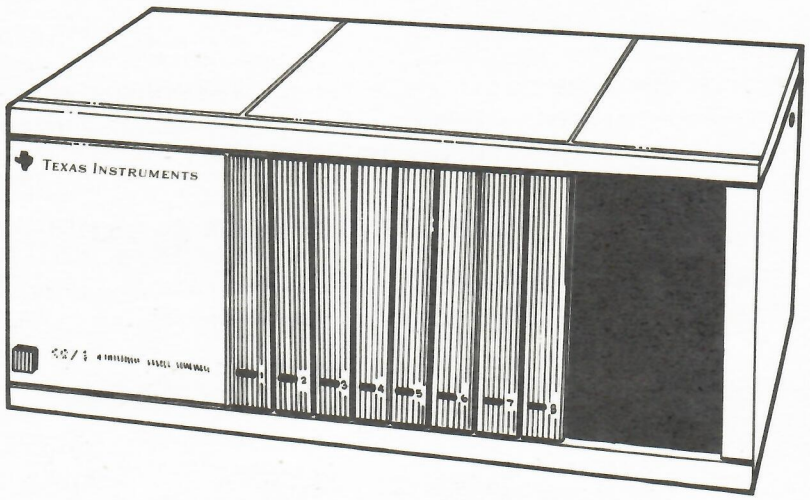

IMPORTANT

Record the serial number from the back of the Peripheral Expansion System and the purchase date in the space below. The serial number is identified by the words "SERIAL NO." on the back of the case. Always reference this information in any correspondence.

PHP1200	41704ATA4683	12/21/83
Model No.	**Serial No.**	**Purchase Date**

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INTRODUCTION

The TI Peripheral Expansion System allows you to add accessories to your computer system in a single, convenient location by inserting them in the peripheral system itself. The package includes the Peripheral Expansion System and the Peripheral Expansion Card with a connecting cable, which combine to serve as an interface between the computer console and the accessories in the unit.

With the Peripheral Expansion System attached to your TI Home Computer, you can:

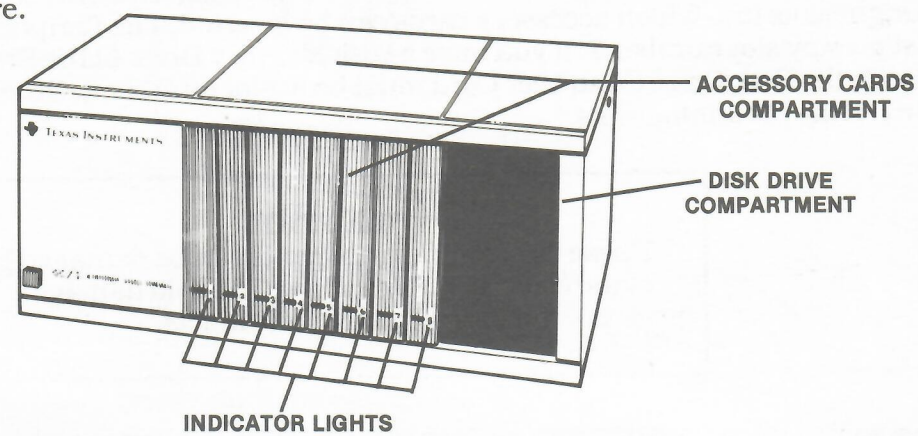
- Increase the capabilities of your computer system with a variety of accessories in the form of slide-in cards.*
- Install a TI Disk Memory Drive* in the compartment designed for this purpose.
- Connect the unit to the computer via cable to provide flexibility in the placement of your equipment.

The result is a simplified method for expanding your computer system, which centralizes most of your equipment in one place and reduces the space requirements necessary for setting up the system.

By simply removing the top of the unit and sliding the accessory cards into the slots provided, the Peripheral Expansion System can hold up to seven computer accessories, such as the TI Disk Drive Controller Card, the TI RS232 Interface Card, the TI Memory Expansion Card, and the TI P-Code Peripheral Card, in addition to the Peripheral Expansion Card.

DESIGN OF THE PERIPHERAL EXPANSION SYSTEM

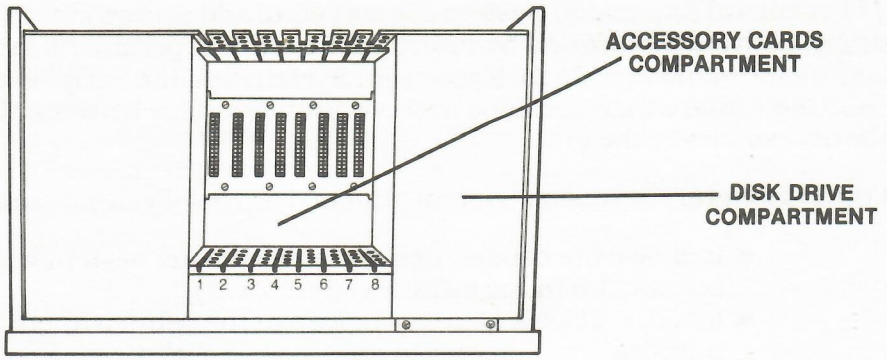
The Peripheral Expansion System contains two compartments for attaching accessories to your computer system. As you face the front of the unit, these compartments are positioned as shown here.



Note that each accessory card has an indicator light that shines through one of the eight corresponding openings on the front of the peripheral system (see "Testing the Peripheral Expansion System"). The right-hand compartment is designed to hold a TI Disk Memory Drive, Model PHP1250 or equivalent, which has been tailored to fit the peripheral system. For information on installing and using this disk drive, refer to its owner's manual.

* Sold separately

When you remove the top of the peripheral system, the two compartments look like this.



Each of the eight accessory card positions is labeled with its corresponding number as shown. Each position also has an opening in the back for the connector tab, if the card has one. Accessory cards can be inserted in the Peripheral Expansion System in any order (position) with only two exceptions. First, the Peripheral Expansion Card must occupy the first slot to the left as you face the front of the unit (slot number 1). Second, if you have a Disk Memory Drive in the peripheral system, the Disk Drive Controller Card must be in the last slot (slot number 8) so that the internal cable connection can be made. If you are using external drives only, the Controller Card can be placed in any slot.

SET-UP INSTRUCTIONS

The steps involved in inserting the Peripheral Expansion Card into the Peripheral Expansion System, connecting the unit to the computer, and then checking the unit's operation are included in this section. Please read this material completely before proceeding.

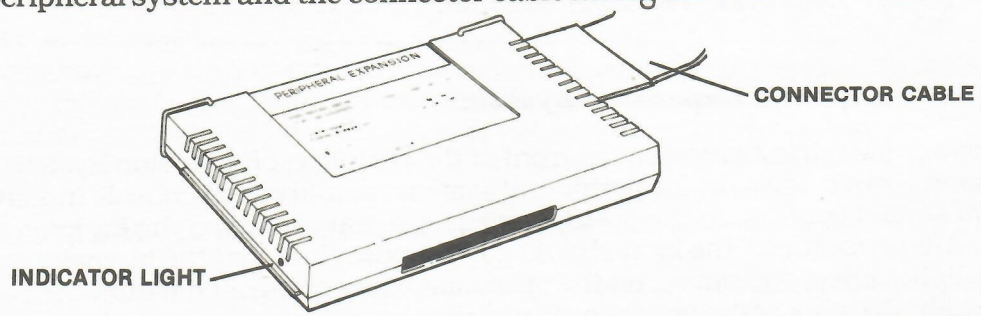
Note: As explained in "Design of the Peripheral Expansion System," the peripheral system has eight slots into which accessory cards can be inserted. The Peripheral Expansion Card must occupy slot number 1. If you have a Disk Memory Drive in the Peripheral Expansion System, the Disk Drive Controller Card must be in slot number 8. Other cards can be inserted in any of the remaining slots.

CAUTION
These electronic components can be damaged by static electricity discharges. To avoid damage, do not touch the connector contacts.

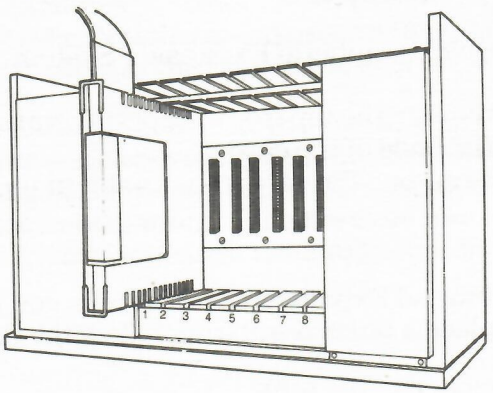
Once you've unpacked the unit, you're ready to insert the Peripheral Expansion Card into the unit. (Save the packing material for storing or transporting the unit.)

Inserting the Peripheral Expansion Card

1. First turn off the computer console and all attached devices.
2. WARNING: TO AVOID DAMAGING ACCESSORY CARDS, WAIT TWO (2) MINUTES AFTER TURNING OFF THE UNIT FOR THE POWER TO DISCHARGE BEFORE PROCEEDING.
3. Remove the top from the peripheral system by lifting the back edge of the top and pulling up.
4. The label identifying the Peripheral Expansion Card is on the top of the card. On the front of the card is an indicator light that is seen from the front of the peripheral system when the card is active. Hold the Peripheral Expansion Card with the indicator light facing the front of the peripheral system and the connector cable facing the back of the unit.



5. Carefully align the card with the desired slot so that the connector cable extends through the opening in the back of the unit; press the card firmly down into the slot.



6. Replace the top on the Peripheral Expansion System by sliding the front edge under the extension on the front of the unit and firmly pressing down on the back edge of the top. Do not run the system without the top in place because the top ensures proper ventilation. *Note:* If the top does not fit properly, remove the card and realign it in the slot, remembering to press down firmly until the connection is made.
7. With the support foot downward, push one end of the cable connector into the accessory connector on the right side of the computer console (or the last external accessory, if any are attached to the console).

8. Plug one end of the Peripheral Expansion cord into the 3-prong pin on the back of the unit. Then plug the other end into a 115-volt outlet.

CAUTION

Always disconnect the Peripheral Expansion System before moving the computer console. The cable connecting the console and peripheral system is not designed to support the weight of the units. To prevent damage, always disconnect all devices before moving any part of your Home Computer system. For long distance moves, remove all cards from the Peripheral Expansion System. Then repack the devices in their original packing material.

Testing the Peripheral Expansion System

1. The power switch is located on the front of the Peripheral Expansion System in the lower left-hand corner. Turn on the peripheral system, monitor, and console in that order.
2. A light should come on in the position where you have inserted the Peripheral Expansion Card. After a moment, the light should go off again. Note that the intensity and duration of the light varies, depending on the operation being performed within the system.
3. If the light does not come on, the card may not be properly inserted. Repeat the "Set-Up Instructions" procedure. If you still have difficulty, see "In Case of Difficulty" on page 7.

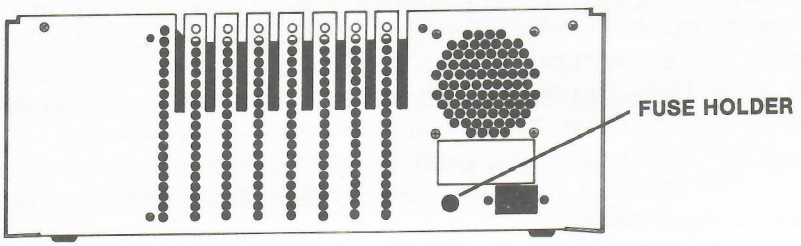
Removing the Peripheral Expansion Card

1. Turn OFF the computer console, Peripheral Expansion System, monitor, and any other attached devices.
2. Wait two minutes and then remove the top from the peripheral system.
3. Pull up the wire handles on the ends of the card.
4. Firmly pull on the handles to remove the card from its slot in the peripheral system.

Changing the Fuse

The label on the back of the Peripheral Expansion System tells you the type of fuse required by the peripheral system. To replace a burned-out fuse, follow the directions below.

1. Locate the fuse holder on the back of the unit.



2. Turn off the computer console, Peripheral Expansion System, and any other attached devices. Pull the Peripheral Expansion System cord from the wall outlet.
3. Unscrew the fuse holder and remove the fuse.
4. Next, insert the new fuse. Then screw the fuse holder back into the peripheral system.
5. Plug the Peripheral Expansion System cord back into the wall outlet. Turn on the Peripheral Expansion System, monitor, and console.

IN CASE OF DIFFICULTY

If the Peripheral Expansion System does not appear to be working properly, check the following:

1. *Power* — Be sure that the peripheral system is plugged in and turned on. Also, check to be sure that the fuse is not blown by looking at the fuse to see if the wire is unbroken.
2. *Card Position* — Turn the power OFF, wait two minutes, and remove the top from the peripheral system. Verify that all cards are inserted properly, and then replace the top.
3. *Cable Connection* — Check for proper connection between the console and peripheral system.
4. *Home Computer* — Check to see that the Home Computer works properly with all accessories disconnected.
5. If none of the above procedures corrects the difficulty, consult "If You Have Questions or Need Assistance" or see the "Maintenance and Service Information" section of the *User's Reference Guide*.

EXCHANGE CENTERS (LOCAL SERVICE OPTIONS)

If your Peripheral Expansion System requires service, instead of returning the unit to a service facility for repair or replacement, you may elect to exchange the unit for a factory-reconditioned Peripheral Expansion System of the same model (or equivalent model specified by TI) by going in person to one of the exchange centers which have been established across the United States. A handling fee will be charged by the exchange center for in-warranty exchanges of the Peripheral Expansion System. Out-of-warranty exchanges will be charged at the rates in effect at the time of the exchange.

To determine if there is an exchange center in your area, look for Texas Instruments Exchange Center in the white pages of your telephone directory, or look under the Calculator and Adding Machine heading in the yellow pages. Please call the exchange center for availability and exchange fee information. Write the Consumer Relations Department for further details and the location of the nearest exchange center.

IF YOU HAVE QUESTIONS OR NEED ASSISTANCE

If you have questions concerning Peripheral Expansion System repair, or peripheral or software purchase, please call our Customer Relations Department at 800-858-4565 (toll free within the contiguous United States except Texas) or 800-692-4279 within Texas. The operators at these numbers cannot provide technical assistance.

For technical questions, such as programming information, specific applications, etc., you can call 806-741-2663. Please note that this is not a toll-free number, and collect calls cannot be accepted.

As an alternative, you can write to:

Consumer Relations Department
Texas Instruments Incorporated
P.O. Box 53
Lubbock, Texas 79408

Because of the number of suggestions which come to Texas Instruments from many sources containing both new and old ideas, Texas Instruments will consider such suggestions only if they are freely given to Texas Instruments. It is the policy of Texas Instruments to refuse to receive any suggestions in confidence. Therefore, if you wish to share your suggestions with Texas Instruments, or if you wish us to review any programs which you have developed, please include the following statement in your letter:

> "All of the information forwarded herewith is presented to Texas Instruments on a nonconfidential, nonobligatory basis; no relationship, confidential or otherwise, expressed or implied, is established with Texas Instruments by this presentation. Texas Instruments may use, copyright, distribute, publish, reproduce, or dispose of the information in any way without compensation to me."

THREE-MONTH LIMITED WARRANTY

THIS TEXAS INSTRUMENTS PERIPHERAL EXPANSION SYSTEM WARRANTY EXTENDS TO THE ORIGINAL CONSUMER PURCHASER OF THE ACCESSORY.

WARRANTY DURATION

This Peripheral Expansion System is warranted for a period of three (3) months from the date of the original purchase by the consumer.

WARRANTY COVERAGE

This Peripheral Expansion System is warranted against defective materials or workmanship. **THIS WARRANTY IS VOID IF THE ACCESSORY HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLECT, IMPROPER SERVICE OR OTHER CAUSES NOT ARISING OUT OF DEFECTS IN MATERIALS OR WORKMANSHIP.**

WARRANTY DISCLAIMERS

ANY IMPLIED WARRANTIES ARISING OUT OF THIS SALE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE ABOVE THREE-MONTH PERIOD. TEXAS INSTRUMENTS SHALL NOT BE LIABLE FOR LOSS OF USE OF THE HARDWARE OR OTHER INCIDENTAL OR CONSEQUENTIAL COSTS, EXPENSES, OR DAMAGES INCURRED BY THE CONSUMER OR ANY OTHER USER.

Some states do not allow the exclusion or limitation of implied warranties or consequential damages, so the above limitations or exclusions may not apply to you in those states.

LEGAL REMEDIES

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

WARRANTY PERFORMANCE

During the above three-month warranty period, your Peripheral Expansion System will be repaired or replaced with a new or reconditioned unit of the same or equivalent model (at TI's option) when the unit is returned by prepaid shipment to a Texas Instruments Service Facility listed below. The repaired or replacement unit will be warranted for three months from date of repair or replacement. Other than the postage requirement, no charge will be made for the repair or replacement of in-warranty units.

Texas Instruments strongly recommends that you insure the unit for value, prior to shipment.

TEXAS INSTRUMENTS CONSUMER SERVICE FACILITIES

U.S. Residents
Texas Instruments Service Facility
2303 North University
Lubbock, Texas 79415

Canadian Residents
Geophysical Services Incorporated
41 Shelley Road
Richmond Hill, Ontario, Canada L4C5G4

Consumers in California and Oregon may contact the following Texas Instruments offices for additional assistance or information:

Texas Instruments Consumer Service
831 South Douglas Street
El Segundo, California 90245
(213)973-1803

Texas Instruments Consumer Service
6700 Southwest 105th
Kristin Square, Suite 110
Beaverton, Oregon 97005
(503)643-6758

Texas Instruments invented the integrated circuit, the microprocessor, and the microcomputer. Being first is our tradition.

TEXAS INSTRUMENTS
INCORPORATED

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ADDENDUM
PERIPHERAL EXPANSION SYSTEM ON/OFF SWITCH AND FUSE HOLDER

The ON/OFF switch at the lower-left-hand corner of the front of the Peripheral Expansion System has been changed. A rocker-style switch is now used. When the switch is turned off, a small white circle is visible at the top tab of the switch. To turn the switch on, push the top tab of the switch in so that the white circle is no longer visible. To turn the switch off, push the bottom tab in so that the white circle is visible again.

The fuse holder on the back of the Peripheral Expansion System has also been changed. Thus the instructions beginning at step 3 under "Changing the Fuse" on page 6 of your owner's manual should read as follows:

3. Notice that the fuse holder, made of black molded plastic and located just to the left of the power cord connector, looks like a small square with a number at each side of the square. These numbers correspond with the voltage of the wall outlet you are using. (Standard U.S.A. outlets are 115-120 volts). A pointer at the top of the square points to the top number, which must match the voltage of the wall outlet that you are using.

   Insert the tip of small standard screwdriver or pocket knife blade into the small notch at the right side of the square. Pry the square back and the fuse will come out of the unit.

4. Next, insert the new fuse. **IMPORTANT:** Make certain that the pointer points to the number which matches the voltage of the wall outlet that you are using. Then push the fuse holder back into the peripheral system.

5. Plug the Peripheral Expansion System cord back into the wall outlet. Turn on the Peripheral Expansion System, monitor, and console.

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(Use with 1039343-1)